a mobile communications system having a fixed part and a plurality of mobile <u>parts</u>
[units] for communicating with the fixed part,

each mobile <u>part</u> [unit] including means for transmitting to the fixed part of a request for guidance information relating to a destination specified by the user of the mobile <u>part</u> [unit], and for receiving such guidance information from the fixed part, and

the fixed part including:

means for determining the location of a mobile <u>part [unit]</u> requesting guidance information,

means for generating guidance information according to the present location and specified destination of the mobile <u>part</u> [unit], and

means for transmitting the guidance information so generated to the mobile <u>part</u> [unit], whereby information dependent on the location and specified destination of the mobile <u>part</u> [unit] is transmitted to the mobile <u>part</u> [unit],

means for determining the location of the mobile part in relation to a geographical overlay comprising a plurality of discrete predetermined overlay areas, and

means for transmitting guidance information associated with an overlay area which includes the location of at least one mobile part,

whereby mobile parts within that overlay area simultaneously receive the same guidance information associated with that overlay area.

(4-Times Amended) A navigation information system for providing information to each of plural mobile users dependent on their locations, the system comprising:

Cont.

F

MANNINGS et al Serial No. 08/793,502

means for determining the location of a mobile <u>part</u> [unit] requesting guidance information relating to a specified destination,

means for generating information for guidance of the user of a mobile <u>part</u> [unit] according to the present location and specified destination of the mobile <u>part</u> [unit], and

a communications system for transmitting the guidance information so generated to the mobile part [unit],

whereby guidance information dependent on the present location and specified destination of the mobile <u>part</u> [unit] is transmitted to the mobile <u>part</u> [unit],

means for determining the location of a mobile <u>part</u> [unit] in relation to a geographical overlay comprising a plurality of discrete predetermined overlay areas, and

means for transmitting guidance information associated with an overlay area which includes the location of at least one mobile <u>part</u> [unit],

whereby mobile parts within that overlay area [may] simultaneously receive the same [common] guidance information associated with that overlay area.

3532. (4-Times Amended) A method of providing navigation guidance information to mobile <u>parts</u> [units] of a mobile radio system, the information being dependent on the locations of the mobile <u>parts</u> [units], the method comprising the steps of:

transmitting, from a mobile <u>part</u> [unit] to the fixed part, a request for navigation guidance to a specified destination,

determining the location of the mobile part [unit];

generating guidance information on the basis of the location information, the requested destination, and navigation data stored in the fixed part; and

V

transmitting the guidance information from the fixed part to the mobile part [unit];

whereby guidance information relevant to the present location and specified destination of the mobile part [unit] is transmitted to the mobile part [unit];

determining the location of the mobile <u>part</u> [unit] in relation to a geographical overlay comprising a plurality of discrete predetermined overlay areas,

generating guidance information associated with an overlay area which includes the location of at least one mobile part, and

transmitting [the] guidance information associated with the relevant overlay area to mobile parts within that overlay area,

whereby mobile parts within that overlay area simultaneously receive the same guidance information associated with that overlay area.

To obviate the rejection of claims 30, 31 and 55 under 35 U.S.C. §112(2), please amend claim 30:

3 230. (Thrice Amended) A mobile unit for a navigation information system, said mobile unit comprising:

means for identifying the present position of the mobile unit,

means for transmitting, over a communications link, a request for guidance to a specified destination, and

guidance instruction means controllable by guidance instruction information received over the communications link and associated with one of a plurality of discrete predetermined geographical overlay areas containing said present position,

ent.

Y

gt could

whereby guidance instructions between the present location and the specified location <u>are</u> [can be] communicated to a user by means of the guidance instruction means.

Please amend provisionally allowed dependent claims 8, 11, 12, 39, 42, 43, 49, 50 and 52 to self-standing independent allowed format:

7 %. (Twice Amended) A <u>navigation information</u> system [as in claim 1] <u>for providing information to a mobile user dependent on the location of the mobile user, the system comprising:</u>

a mobile communications system having a fixed part and a plurality of mobile parts for communicating with the fixed part,

each mobile part including means for transmitting to the fixed part a request for guidance information relating to a destination specified by the user of the mobile part and for receiving such guidance information from the fixed part, and

the fixed part including:

means for determining the location of a mobile part requesting guidance information,

means for generating guidance information according to the present location and

specified destination of the mobile part, and

means for transmitting the guidance information so generated to the mobile part,

whereby information dependent on the location and specified destination of the mobile

part is transmitted to the mobile part,

means for determining the location of the mobile part in relation to a geographical overlay comprising a plurality of discrete predetermined overlay areas, and

F

Show on the state of the state

means for transmitting guidance information associated with an overlay area which includes the location of at least one mobile part,

whereby mobile parts within that overlay area simultaneously receive the same guidance information associated with that overlay area,

means for locating the position of the mobile part by radio location,

wherein the means for locating position comprises:

a satellite navigation system receiver, and

means for identifying the location of the mobile part in relation to elements of the fixed part of the communications system.

11. (Thrice Amended) A <u>navigation information</u> system [as claimed in claim 1]

for providing information to a mobile user dependent on the location of the mobile user,

the system comprising:

a mobile communications system having a fixed part and a plurality of mobile parts for communicating with the fixed part,

each mobile part including means for transmitting to the fixed part a request for guidance information relating to a destination specified by the user of the mobile part and for receiving such guidance information from the fixed part, and

the fixed part including:

means for determining the location of a mobile part requesting guidance information,

means for generating guidance information according to the present location and

specified destination of the mobile part, and

means for transmitting the guidance information so generated to the mobile part,



whereby information dependent on the location and specified destination of the mobile part is transmitted to the mobile part.

means for determining the location of the mobile part in relation to a geographical overlay comprising a plurality of discrete predetermined overlay areas, and

means for transmitting guidance information associated with an overlay area which includes the location of at least one mobile part,

whereby mobile parts within that overlay area simultaneously receive the same guidance information associated with that overlay area,

wherein the mobile part has means for location its position by dead reckoning.

12. (Thrice Amended) A <u>navigation information</u> system [as in claim 1]

for providing information to a mobile user dependent on the location of the mobile user,
the system comprising:

a mobile communications system having a fixed part and a plurality of mobile parts for communicating with the fixed part,

each mobile part including means for transmitting to the fixed part a request for guidance information relating to a destination specified by the user of the mobile part and for receiving such guidance information from the fixed part, and

the fixed part including:

means for determining the location of a mobile part requesting guidance information,

means for generating guidance information according to the present location and

specified destination of the mobile part, and

means for transmitting the guidance information so generated to the mobile part,

P

MANNINGS et al Serial No. 08/793,502

whereby information dependent on the location and specified destination of the mobile part is transmitted to the mobile part.

means for determining the location of the mobile part in relation to a geographical overlay comprising a plurality of discrete predetermined overlay areas, and

means for transmitting guidance information associated with an overlay area which includes the location of at least one mobile part,

whereby mobile parts within that overlay area simultaneously receive the same guidance information associated with that overlay area,

wherein[;] the fixed part includes means for generating and maintaining guidance data based on vehicle movement data derived from time information and position measurements of a plurality of the mobile parts and estimations of future locations of the mobile parts based on the guidance information previously transmitted to the mobile parts.

(Twice Amended) A method [as in claim 32,] of providing navigation guidance information to mobile parts of a mobile radio system, the information being dependent on the locations of the mobile parts, the method comprising:

transmitting, from a mobile part to the fixed part, a request for navigation guidance to a specified destination,

determining the location of the mobile part;

generating guidance information on the basis of the location information, the requested destination, and navigation data stored in the fixed part; and

transmitting the guidance information from the fixed part to the mobile part;

Cont

C

whereby guidance information relevant to the present location and specified destination of the mobile part is transmitted to the mobile part;

determining the location of the mobile part in relation to a geographical overlay comprising a plurality of discrete predetermined overlay areas,

generating guidance information associated with an overlay area which includes the location of at least one mobile part, and

transmitting guidance information associated with the relevant overlay area to mobile parts within that overlay area,

whereby mobile parts within that overlay area simultaneously receive the same guidance information associated with that overlay area,

wherein the position of the mobile part is identified by a radio location method, and wherein the position of the mobile part [unit] is determined by means of a satellite navigation system and by identifying the location of the mobile part in relation to elements of the fixed part of the communications system.

(Thrice Amended) A method [as in claim 32] of providing navigation guidance information to mobile parts of a mobile radio system, the information being dependent on the locations of the mobile parts, the method comprising:

transmitting, from a mobile part to the fixed part, a request for navigation guidance to a specified destination,

determining the location of the mobile part;

generating guidance information on the basis of the location information, the requested destination, and navigation data stored in the fixed part; and

5

transmitting the guidance information from the fixed part to the mobile part;

whereby guidance information relevant to the present location and specified destination

of the mobile part is transmitted to the mobile part;

determining the location of the mobile part in relation to a geographical overlay comprising a plurality of discrete predetermined overlay areas,

generating guidance information associated with an overlay area which includes the location of at least one mobile part, and

transmitting guidance information associated with the relevant overlay area to mobile parts within that overlay area,

whereby mobile parts within that overlay area simultaneously receive the same guidance information associated with that overlay area,

wherein the mobile part [unit] identifies its position by dead reckoning.

46 43. (Thrice Amended) A method [as in claim 32 including the steps of:] of providing navigation guidance information to mobile parts of a mobile radio system, the information being dependent on the locations of the mobile parts, the method comprising:

transmitting, from a mobile part to the fixed part, a request for navigation guidance to a specified destination,

determining the location of the mobile part;

generating guidance information on the basis of the location information, the requested destination, and navigation data stored in the fixed part; and

transmitting the guidance information from the fixed part to the mobile part;



whereby guidance information relevant to the present location and specified destination of the mobile part is transmitted to the mobile part;

determining the location of the mobile part in relation to a geographical overlay comprising a plurality of discrete predetermined overlay areas.

generating guidance information associated with an overlay area which includes the location of at least one mobile part, and

transmitting guidance information associated with the relevant overlay area to mobile parts within that overlay area,

whereby mobile parts within that overlay area simultaneously receive the same guidance information associated with that overlay area,

generating and maintaining data based on vehicle movement data derived from time information and position measurements of a plurality of the mobile parts and estimations of future locations of the mobile parts based on the guidance information previously transmitted to the mobile parts.

(Amended) A <u>navigation information</u> system [as in claim 7,] <u>for providing</u> information to a mobile user dependent on the location of the mobile user, the system <u>comprising</u>:

a mobile communications system having a fixed part and a plurality of mobile parts for communicating with the fixed part,

each mobile part including means for transmitting to the fixed part a request for guidance information relating to a destination specified by the user of the mobile part and for receiving such guidance information from the fixed part, and

- 11 -

V

the fixed part including:

means for determining the location of a mobile part requesting guidance information,

means for generating guidance information according to the present location and

specified destination of the mobile part, and

means for transmitting the guidance information so generated to the mobile part,

whereby information dependent on the location and specified destination of the mobile

part is transmitted to the mobile part,

means for determining the location of the mobile part in relation to a geographical overlay comprising a plurality of discrete predetermined overlay areas, and

means for transmitting guidance information associated with an overlay area which includes the location of at least one mobile part,

whereby mobile parts within that overlay area simultaneously receive the same guidance information associated with that overlay area, and

[wherein the] means for locating the position of the mobile part by radio location and comprising [comprises] at least one of:

- (a) a satellite navigation system receiver, and
- (b) means for identifying the location of the mobile part in relation to elements of the fixed part of the communications system.

(Amended) A <u>navigation information</u> system [as in claim 1] <u>for providing</u> information to a mobile user dependent on the location of the mobile user, the system <u>comprising</u>:

F

a mobile communications system having a fixed part and a plurality of mobile parts for communicating with the fixed part,

each mobile part including means for transmitting to the fixed part a request for guidance information relating to a destination specified by the user of the mobile part and for receiving such guidance information from the fixed part, and

the fixed part including:

means for determining the location of a mobile part requesting guidance information,

means for generating guidance information according to the present location and

specified destination of the mobile part, and

means for transmitting the guidance information so generated to the mobile part,

whereby information dependent on the location and specified destination of the mobile

part is transmitted to the mobile part,

means for determining the location of the mobile part in relation to a geographical overlay comprising a plurality of discrete predetermined overlay areas, and

means for transmitting guidance information associated with an overlay area which includes the location of at lest one mobile part,

whereby mobile parts within that overlay area simultaneously receive the same guidance information associated with that overlay area,

wherein[:] the fixed part includes means for generating and maintaining guidance data based on at least one of:

(a) vehicle movement data derived from time information and position measurements of a plurality of the mobile parts, and





J9 Corcel

(b) estimations of future locations of the mobile parts based on the guidance information previously transmitted to the mobile parts.

5082. (Amended) A method [as in claim 32] of providing navigation guidance information to mobile parts of a mobile radio system, the information being dependent on the locations of the mobile parts, the method comprising:

transmitting, from a mobile part to the fixed part, a request for navigation guidance to a specified destination,

determining the location of the mobile part;

generating guidance information on the basis of the location information, the requested destination, and navigation data stored in the fixed part; and

transmitting the guidance information from the fixed part to the mobile part;

whereby guidance information relevant to the present location and specified destination

of the mobile part is transmitted to the mobile part;

determining the location of the mobile part in relation to a geographical overlay comprising a plurality of discrete predetermined overlay areas,

generating guidance information associated with an overlay area which includes the location of at least one mobile part, and

transmitting guidance information associated with the relevant overlay area to mobile parts within that overlay area,

whereby mobile parts within that overlay area simultaneously receive the same guidance information associated with that overlay area, and

4- 6

MANNINGS et al Serial No. 08/793,502

including [the steps of] at least one of:

(a) generating and maintaining data based on vehicle movement data derived from time information and position measurements of a plurality of the mobile parts and

(b) estimations of future locations of the mobile parts based on the guidance information previously transmitted to the mobile parts.

